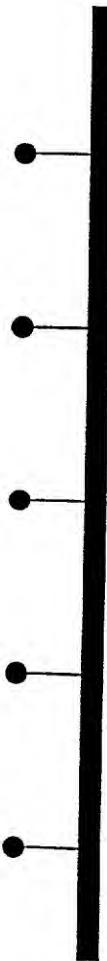


Components of specific imaged gene delivery and diagnosis system

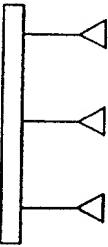
①



Characteristics:

- Long positively charged backbone
- Branching points
- ● = G3R7, TAT domains or other transfection/endolysosome/nuclear targeting agents

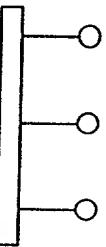
②



Characteristics:

- Short negatively charged backbone
- Branching points or conjugation points
- △ = imaging moieties

③



Characteristics:

- Short negatively charged backbone
- Branching points or conjugation points
- ○ = variable selective targeting agent (Fab, Ig and etc.)

④



Characteristics:
• Oligo or cDNA with transgene of interest

⑤

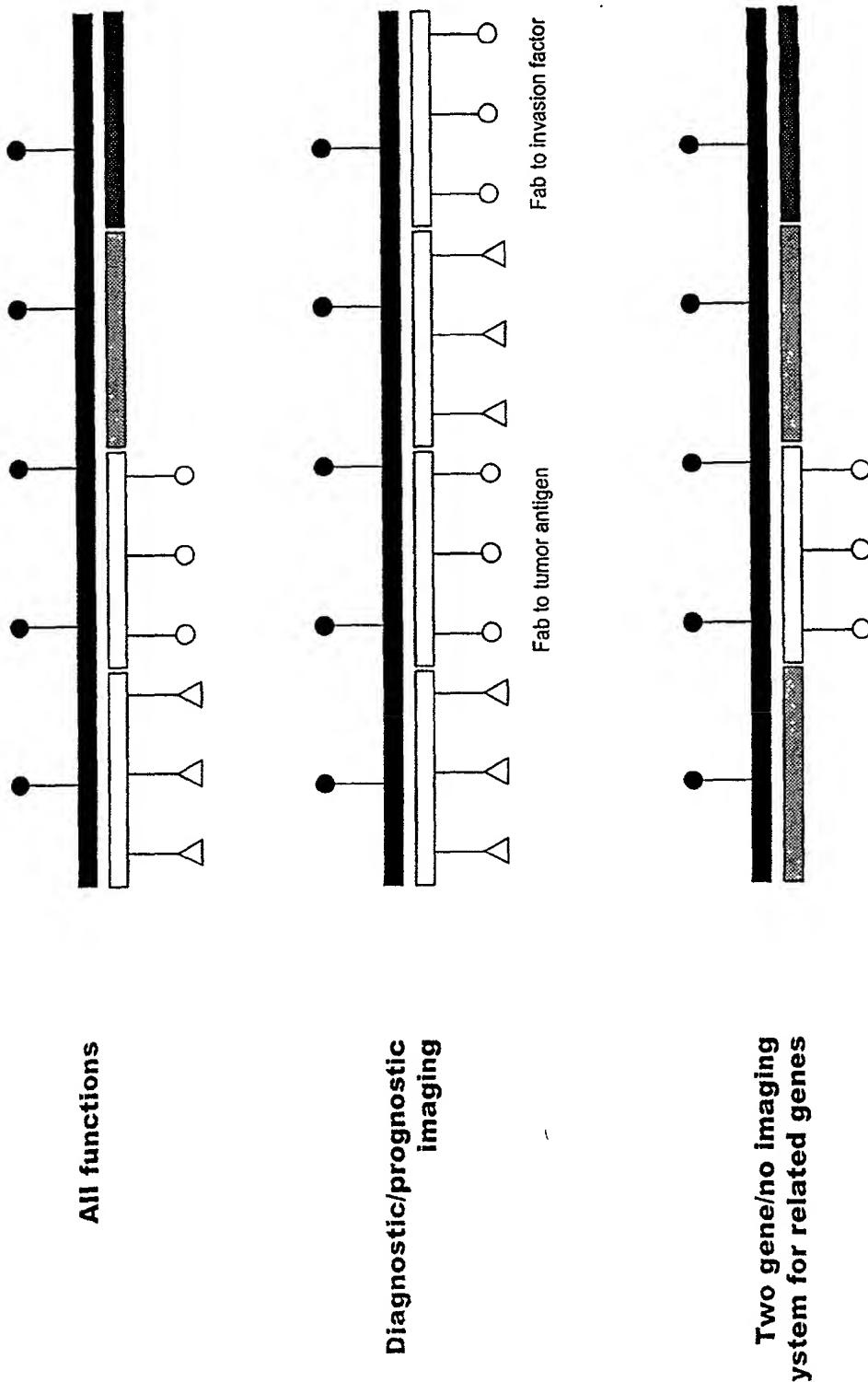


Characteristics:

- DNA encoding persistence factors

Combinations of components above give enhanced specificity ③, diagnostic imaging ②, and gene delivery ④ with high efficiency ① and persistence ⑤.

Examples of potential assembled systems



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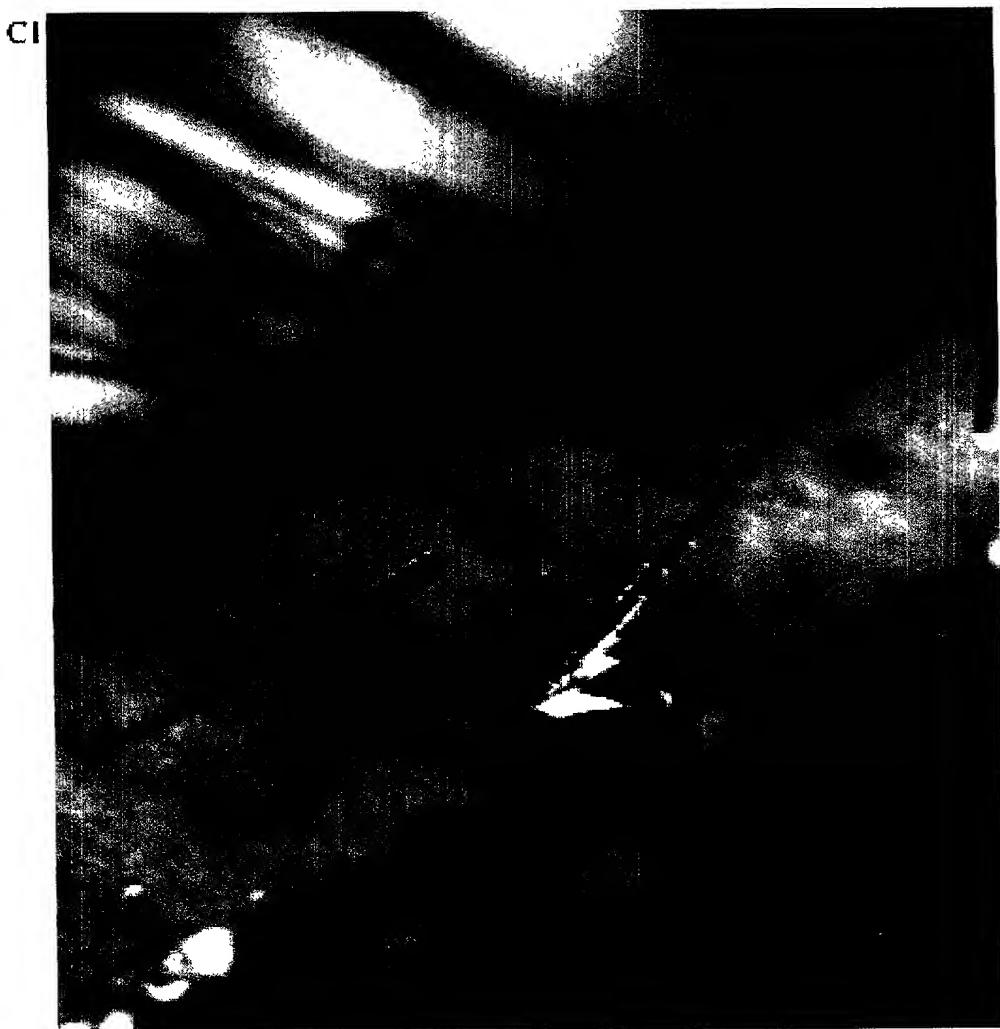
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A4



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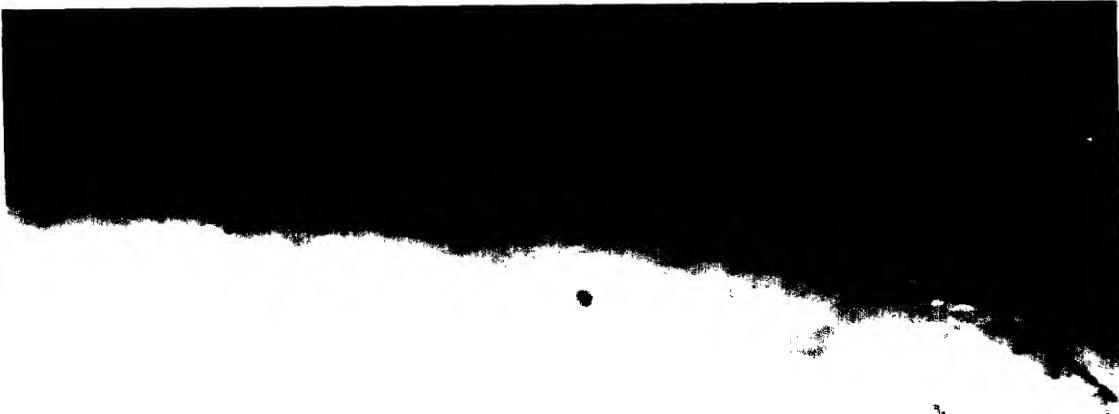
Title: MULTI-COMPONENT BIOLOGICAL TRANSPORT SYSTEMS
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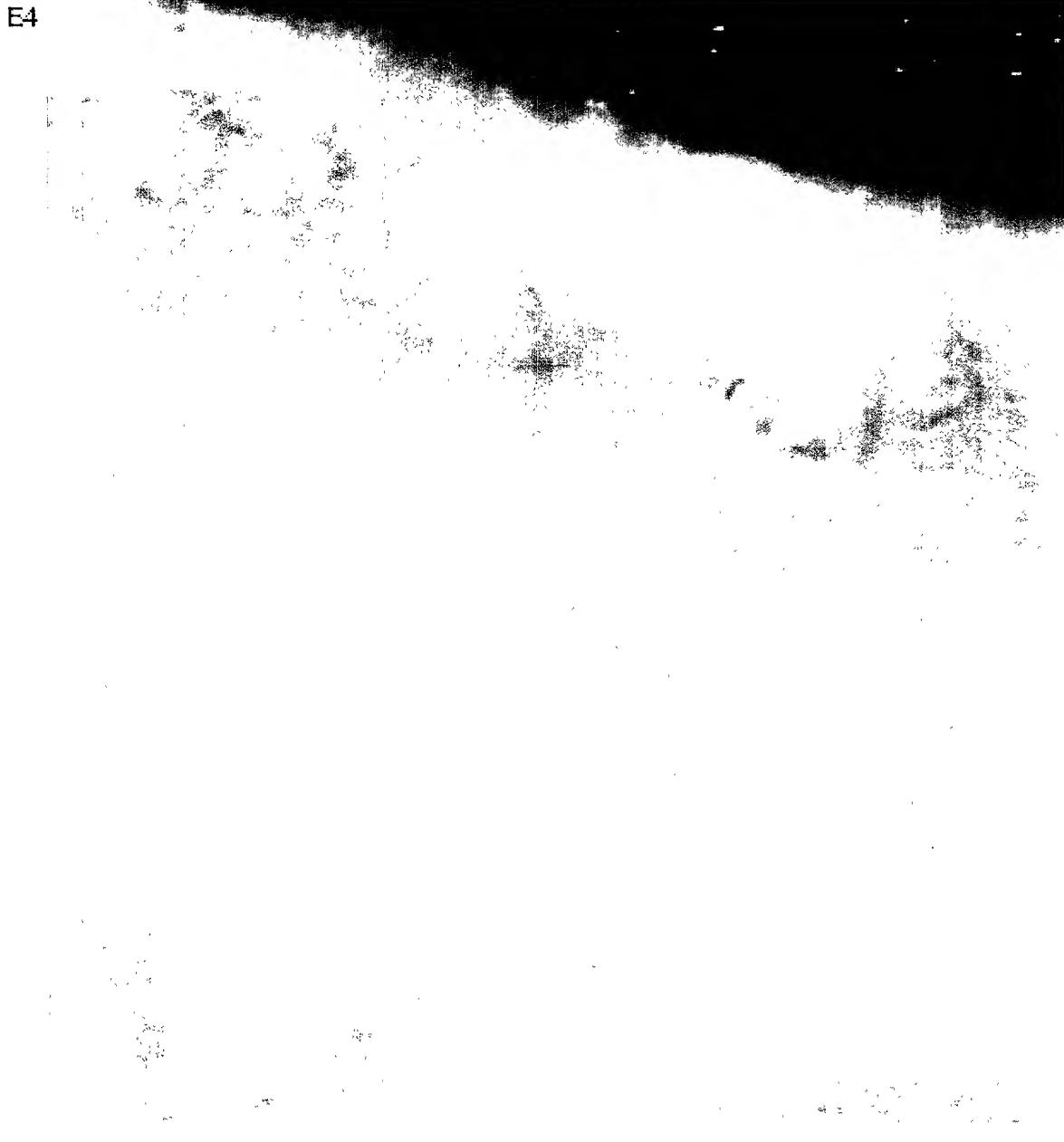
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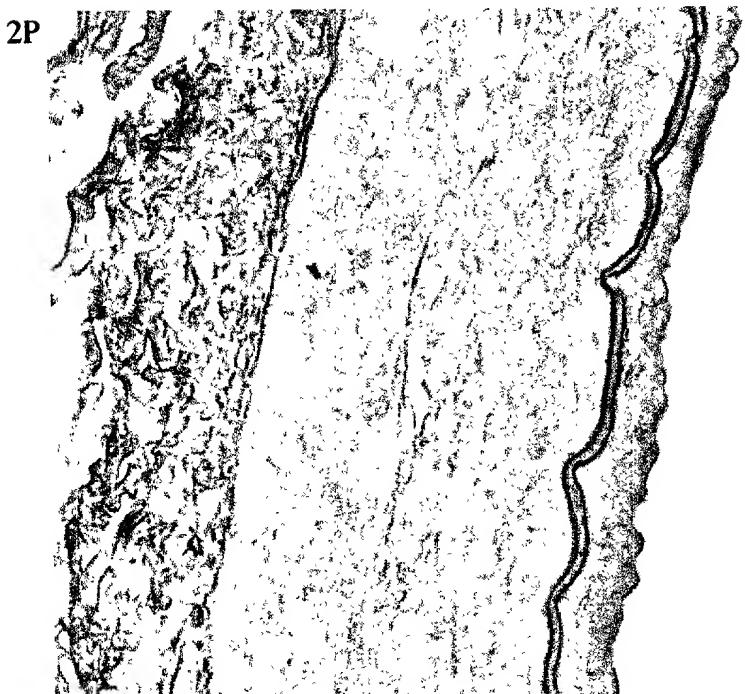
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